United States Department of the Interior

FISH AND WILDLIFE SERVICE
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In reply refer to:
1-1-07-I-1521

David Valenstein
Environmental Program Manager
Federal Railroad Administration
1120 Vermont Avenue, MS-20
Washington, D.C. 20590

JUL 23 2007

Subject: Draft Bay Area to Central Valley High-Speed Train Program Environmental Impact Report/Environmental Impact Statement

Dear Mr. Valenstein:

This letter responds to your July 10, 2007 disclosure of the Draft Bay Area to Central Valley High-Speed Train Program Environmental Impact Report/Environmental Impact (EIR/EIS) and comment period. We, the U.S Fish and Wildlife Service (Service) are providing the following comments regarding the effects to federally listed species resulting from the proposed Bay Area to Central Valley High-Speed Train Program, specifically as it affects the San Joaquin Valley and adjacent habitats of the coast range mountains. A copy of the draft EIR/EIS was received in our office July 10, 2007. The proposed project is located in part, in the following San Joaquin Valley and foothill counties: San Joaquin, Stanislaus, Merced, Contra Costa, and Alameda. At full build out, the proposed electric high speed train and station system would traverse several additional counties; however, the focus of the comments herein pertain to the northern San Joaquin Valley and foothill portions only. Because the draft EIR/EIS presents a programmatic level of analysis, it is not possible to know precisely the location, extent, and particular characteristics of listed species and their habitats that would be affected or the precise impacts therein. However, according to Service files and other information in our office, we believe it is likely that several species may be adversely affected and/or several acres of critical habitat may be degraded by the proposed project. The Service is providing the following comments pursuant to the Endangered Species Act of 1973, as amended (Act). F002-1

According to the draft EIR/EIS, the proposed High-Speed Train (HST) system, is electrified steel-wheel-on-steel-rail dedicated service, with a maximum speed of 220 mph (350 kph). A fully grade-separated, access-controlled right-of-way would be constructed, except where the system would be able to share tracks at lower speeds with other compatible passenger rail services. Shared track operations would use existing rail infrastructure in areas where construction of new separate HST facilities would not be feasible. The power supply for the HST would consist of a 2-by-25-kilovolt (kV) overhead catenary system for all electrified portions of the statewide system. Supply stations would be required at approximately 30-mile intervals. Based on the F002-2

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estimated power needs of this system, these stations would need to be approximately 20,000 square ft (200 ft by 100 ft). Switching stations would be required at approximately 15-mile intervals. These stations would need to be approximately 7,500 square ft (150 ft by 50 ft). Paralleling (booster) stations would be required at approximately 7.5-mile intervals. These stations would need to be approximately 5,000 square ft (100 ft by 50 ft). Each station would include a control house that would need to be approximately 800 square ft (40 ft by 20 ft).

Use of existing highways and rails systems would be maximized. Nearly 70% of the adopted preferred HST alignments are either within or adjacent to a major existing railroad or highway right-of-way. Underpasses or overpasses or other appropriate passageways would be designed to avoid, minimize, and/or mitigate any potential impacts to wildlife movement. In the city of Los Banos, Merced County, one site for a fleet storage/service and inspection/light maintenance facility to support the Pacheco Pass alignments could be located immediately west of where SR-165 intersects Henry Miller Avenue, also parallel with Henry Miller Avenue. In the city of Merced, in Merced County, one site for a fleet storage/service and inspection/light maintenance facility to support the Diablo Range direct alignments could be located near Castle Air Force Base. F002-2 cont.

According to the draft EIR/EIS, the proposed HST alignment alternatives would require relatively straight, flat, long linear features; moving or curving the alignment to avoid resources "might not always be feasible". The document states that only general statements of potential impacts can be made at this program level of review because detailed field studies were not conducted and the study areas used for some of the analysis was many times larger than the actual right-of-way (direct impact areas) for the network alternatives under consideration in most instances. There are 256 federally listed plant and animal species in California. The proposed HST system with its regional impacts is likely to adversely affect many of them, at least approximately 35% of them in the Bay Area to Central Valley sections alone. The proposed HST occurs at a time when listed species populations are in decline and habitat continues to be degraded. F002-3

In 1966, our nation saw passage of the Endangered Species Preservation Act, but this law and the subsequent Endangered Species Conservation Act (1969) proved insufficient to protect endangered wildlife. Then, in the early 1970's Congress acted decisively finding that "species of fish, wildlife, and plants are of aesthetic, ecological, educational, historical, recreational, and scientific value to the nation and its people." Congress further declared: "The purposes of [the ESA] are to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered and threatened species" [16 U.S.C. §1531(a)(3) and (b)]. The Act expresses a serious, and legally enforceable, determination on the part of the citizens of this nation to protect, conserve, and recover these species (Sullins 2001). Furthermore Section (7)(a)(1) instructs us that all Federal agencies "shall use their authorities in furtherance of the purposes of [the] Act by carrying out programs for the conservation of endangered species and threatened species". F002-4

Many of the nation's species have been extirpated from California, especially from the San Joaquin Valley. The valley's once rich diverse flora has been almost completely lost and the fauna has not faired much better. The valley was once home to large ungulates: elk, deer, F002-5

pronghorn; and to large carnivores: grizzly and black bears, cougars, and bobcats. Currently, a native mammal endemic to the valley floor, the federally endangered San Joaquin kit fox (kit fox) (*Vulpes macrotis mutica*), is suffering the same fate as its predecessors and is nearly completely extirpated from its historic valley floor habitat. California's rich heritage of biodiversity has been reduced from creatures larger than human beings to that of a little fox the size of a domestic cat. It survives now in the margins of its former range. It survives in the sub-optimal habitat of the coastal range foothills. The intent of the Act is to respond to future conditions by taking appropriate actions in the here and now. The proposed HST as described in the draft EIR/EIS makes no provisions for the future of federally listed species, even and including no assurances of total avoidance of conservation program areas (i.e. lands protected by conservation easements) and areas critical to recovery strategies. The proposed project does little to "provide a program for the conservation of such endangered and threatened species" [16 U.S.C. §1531(a)(3) and (b)]. To assert, as the document does, that the project as proposed "would have short-term effects on the . . . physical environment" and "would result in short-term . . . potential relocation of wildlife from habitat disturbance during construction and operation" expresses a misunderstanding of the health of California's remnant ecosystems and habitat. To where is wildlife expected to relocate?

F002-5 cont.

F002-6

The proposed HST Program is a project with regional effects and consequences. The proposed project, in its northern San Joaquin Valley and foothill portion alone, would affect an area of approximately 1.3 million acres. Though the direct effects due to a proposed alignment, where possible, with existing transportation infrastructure would involve fewer acres, the indirect and cumulative effects to federally listed species would extend far beyond that alignment. The proposed project is inter-dependent upon other planning efforts to address the State's congested highways (Metropolitan Transportation Commission 2007). For example, the Bay Area planners are working to integrate the proposed project with their efforts. U.S. Transportation Secretary Mary Peters has recently announced a grant to the Bay Area's San Francisco Metropolitan Transportation Commission as part of the Urban Partnerships program. The Secretary has awarded grants to five of the nations most congested cities seeking solutions to underperforming existing infrastructure. Cities, such as San Francisco will implement "pricing techniques to pursue [traffic] congestion relief" (M. Peters Secretary of Transportation, interview, 2007). The Service urges that effects to endangered species from the proposed HST project be considered on par with on-going congestion relief efforts. The proposed HST, as a project of the Federal Railroad Administration, should complement and advance on-going efforts to assure the nation's listed species are recovered. The Service believes a project which implements techniques for congestion relief *and* habitat degradation relief is in the best interest of the nation. Consolidation of transportation infrastructure and associated planning that contains sprawl rather than inducing it into habitat has the potential to substantially benefit listed species. Since the draft EIR/EIS asserts the proposed project will reduce road use and consolidate travel by rail, the Service requests analysis of the retirement and removal of those lesser used roads in order to determine restoration potential for listed species' habitat.

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F002-8

The likely threats, harms, and harassments federally listed species would experience as a result of the proposed project include the following: habitat loss and degradation, habitat fragmentation, barriers to dispersal; exposure to noise, artificial lighting, electromagnetism, hazardous waste, pesticides, and ground vibrations; mortality due to train strikes; degraded hydrological

F002-9

functioning; degraded and impaired soil nutrient cycling; and an increased likelihood of the residential and commercial growth the proposed project would induce thereby further reducing and degrading habitat.

The project's proposed connecting rail systems between the Bay Area and Central Valley are likely to have the greatest proportion of adverse effects to listed species in the area considered herein whether they be direct, indirect, cumulative, or inter-related and inter-dependent as is the case with the proposed train stations and train maintenance yards. **Table 7.3-5 Pacheco pass Alternatives: San Jose Diridon Station to San Luis Reservoir** states that 23 special-status plant species and 27 special-status wildlife species may be impacted. Wildlife species likely to be adversely affected for this alignment and for that which crosses the San Joaquin Valley floor are likely to include the kit fox, the California tiger salamander (*Ambystoma californiense*), the California red-legged frog (*Rana aurora draytonii*), the vernal pool fairy shrimp (*Branchinecta lynchi)*, the tadpole shrimp (*Lepidarus packardi*), and the giant garter snake (*Thamnophis gigas*). The critical habitat of the California red-legged frog is likely to be degraded as a result of the proposed southern or Pacheco Pass connector route. The two connector routes within the "proposed alignment area" (Figure1.1-1), specifically the "GEA North" and "Henry Miller" (untitled pdf image) segments, could impact the several current or planned conservation easement areas, recovery strategy areas, or conservation banks that benefit the kit fox and other listed species. F002-9 cont.

One conservation area, the San Luis National Wildlife Refuge Complex (Refuge) is between these two routes. The Refuge is of national significance and importance in terms of its wetlands, waterfowl, and wildlife. Should the connector route pass through the Pacheco Pass area and descend onto the valley floor in a placement that threatens the Refuge's wildlife, research that documents population sources becoming population sinks when replaced with created or degraded habitat (Keagy *et al.* 2005), may become manifest. This would result in severe consequences for the Refuge and the nation's wildlife. The proposed HST would also have serious adverse effects to the kit fox in this area as it would act as an impediment in the Santa Nella area, Merced County, an important kit fox dispersal route.

The ability to disperse is critical to kit fox survival and recovery. Dispersal among sub-populations can rescue declining populations, enhance reproduction, maintain genetic diversity, and reduce risk of extinction. Koopman *et al.* (2000) suggested that efforts to conserve rare species of mammals may be dependent upon achieving habitat conditions which result in successful dispersal. It is unlikely that effects from the proposed project at Pacheco Pass entry onto the valley floor could be off-set significantly without extensive land bridges, i.e. built wildlife corridors, with habitat patches protected in perpetuity for the kit fox on each side of the bridges. Each patch would need to be, at minimum, 1,200 to 2,570 acres of best quality habitat in order for one kit fox pair to persist in the area (Gerrard *et al.* 2001, Cypher 2000). F002-10

In order to off-set adverse effects to listed species caused by the proposed project and the likely reduction in population baseline, the Service requests the subsequent analyses include provisions for conserving habitat by acquisition of fee title or conservation easement as has been standard practice, for example for the recent 21 Federal Highways Administration projects through the California Department of Transportation in the Bay Area and San Joaquin Valley. Subsequent F002-11

analyses should also analyze whether effects can in fact be off-set as this standard practice assumes availability of adequate and suitable habitat which may not be the case in some circumstances. Costs to the overall Bay Area to Central Valley portion of the proposed project should be adjusted accordingly to include listed species' compensation costs. F002-11 cont.

The proposed HST Program presents an opportunity to provide California commuters and commerce the desired traffic congestion relief Californians seek. But it also presents an opportunity to provide habitat degradation relief to the nation's species. The proposed HST Program presents an opportunity to repair, restore, and enhance the environment for listed species due to a consequential reduced need for current and future roads and road networks which have had a devastating and fragmenting effect on habitat. Consequently, we would hope that subsequent plans and EIR/EIS documents categorize types of land "use" more accurately and inclusively beyond that of human use. The land is not a blank slate upon which projects are merely erected as indicated in the document; it is an ecosystem largely in need of repair and restoration in order to meet species' requirements as per the Act. When an ecosystem is healthy, it benefits all. F002-12 cont.

We look forward to working with your agency and the California High-Speed Rail Authority to provide habitat degradation relief for our nation's wildlife and help plan your contributions toward "carrying out programs for the conservation of endangered species" [Section (7)(a)(1)]. Please contact Maryann Owens or Susan Jones of my staff at (916) 414-6600 if you have questions regarding this letter.

Sincerely,

for Peter A. Cross
Deputy Assistant Field Supervisor

cc:
California Department of Fish and Game, Fresno, California (Attn: Julie Vance)
San Luis National Wildlife Refuge, Los Banos, California (Attn: Kim Forrest)

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